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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,380	07/16/2001	Masashi Nakamura	450106-02849	3746

20999 7590 12/15/2005

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EXAMINER	
MA, JOHNNY	
ART UNIT	**PAPER NUMBER**
2617	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,380	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Johnny Ma	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/16/01,9/9/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "DFESCRIPTION" should read "DESCRIPTION" (pg. 1, line 1); "bus 111" should read "bus 110" (pg. 3, line 18); "201E" should read "201D" (pg. 11, line 7); "CPU 82" should read "CPU 86" (pg. 22, line 7); "record key 202C" should read "record key 202E" (pg. 28, lines 25-26); and "(at step S15)" should read "(at step S16)."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7-9, 13-16, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chimoto et al. (US 5,838,383).

As to claim 1, note the Chimoto et al. reference that discloses a multimedia television receiver and method of booting the same. The claimed "a plurality of digital signal processing blocks and a host arithmetic operation processing block as functions necessary for processing a digital signal" is met by "[a]s FIG.1 shows, the television receiver 301 comprises a bus 302, an NTSC decoder module 303, a digital broadcast-signal receiving module 304, a depacket processing module 305, a digital cable module 306, an MPEG video module 304, and an MPEG audio module 308. The bus 302 connects the modules 302 to 308, one another. The receiver 301 further comprises...a

CPU 313" (Chimoto 7:50-60). The claimed "a bus for connecting said host arithmetic operation processing black and said plurality of digital signal processing blocks" is met by bus 302 connected to a plurality of modules 303-308 [digital signal processing blocks] and the CPU 313 [host arithmetic operation processing block] as illustrated in Figure 1 (Chimoto). The claimed "wherein command for controlling the operations of each of the blocks and data of streams are transferred through said bus" is met by "[t]he CPU 313 supplies prescribed parameters through the DMA device 312 and the bus 302 to the digital broadcast-signal receiving module 304..." (Chimoto 9:27-34) and "[i]n the receiver 301, the receiving module 304 selects the BS signals of the channel designated by the remote control data supplied from the remote-controller 309 and converts them into a stream of bits. The stream of bits is supplied to the bus 302" (Chimoto 9:35-50).

As to claim 2, the claimed "wherein said plurality of digital signal processing blocks include at least a front end block for processing a received signal of a digital broadcast" is met by digital broadcast-signal receiving module 304 and digital cable module 306" (Chimoto 7:50-60).

As to claim 3, the claimed "wherein said plurality of digital signal processing blocks include at least a signal processing block for decoding data of streams" is met by "[t]he MPEG video module 307 decodes the video data stream into image data" (Chimoto 10:23-24).

As to claim 4, the claimed "wherein said plurality of digital signal processing blocks include means for interpreting a command received through said bus and executing the command." Note the Chimoto et al. reference discloses "[t]he CPU 313 executes this program to control the other components of the receiver 301. The CPU 313

can set parameters in the modules 303 to 308 and change the parameters whenever necessary" (7:61-66) wherein the control to set parameters [commands] is transmitted through the bus 302 as illustrated in Figure 1. Further note, the Chimoto et al. reference for example discloses "[t]he CPU 313 supplies prescribed parameters through the DMA device 312 and the bus 302 to the digital broadcast-signal receiving module 304, the depacket processing module 305, the PEG video module 307, and the MPEG audio module 308. Once these parameters are set in the modules 304, 305, 307 and 308, these modules are made to receive and process BS signals" (Chimoto 9:27-34) wherein the interpretation and execution of the command parameters is inherent to the operation of the modules in order to properly process the specified signals.

As to claim 7, the claimed "wherein the data of streams contains video data and / or audio data" is met by "[t]he MPEG data stream consists of a video data stream and an audio data stream" (Chimoto 9:46-47).

As to claim 8, the claimed "wherein the video data and / or the audio data has been compressed" is met by "the MPEG data stream" (Chimoto 9:46-47) wherein MPEG is a compression scheme.

As to claim 9, the claimed "wherein said bus is a general-purpose bus" is met by bus 302 as illustrated in Figure 1. The claimed "wherein each block connected to said bus can be added or substituted" is met by "the modules 303 to 308 can be removed form the housing of the receiver 301. Therefore, the modules 303 to 308 can easily be replaced by other modules to change the functions the receiver 301 can perform. Furthermore, the receiver 302 may have extra module receptacles to incorporate additional modules" (Chimoto 10:54-59).

As to claims 13-16 and 19-21, please see rejections of claims 1-4 and 7-9 respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chimoto et al. (US 5,838,383).

As to claim 5, the claimed "wherein the command is a high layer command that does not depend on hardware." Note the Chimoto et al. reference discloses "[t]he CPU 313 executes this program to control the other components of the receiver 301. The CPU 313 can set parameters in the modules 303 to 308 and change the parameters whenever necessary" (Chimoto 7:61-65). However, the Chimoto et al. reference is silent as to the type of command that is sent. Nevertheless, the examiner submits that it is notoriously well known in the art to use high layer commands for the purpose of allowing flexibility in the system by obviating the need for specialized drivers to communicate with different components. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Chimoto et al. commands accordingly for the above stated advantages. The claimed "and that is not on real time basis' is met by "the DMA device 312 controls the transfer of data through the bus 302" wherein it is inherent that the command not be transmitted on a real time basis

when data is in the process of being transferred on the bus in order to avoid transfer errors.

As to claim 17, please see rejection of claim 5.

6. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chimoto et al. (US 5,838,383) in further view of Humpleman et al. (US 6,198,479 B1).

As to claim 6, note the Chimoto et al. reference discloses "[t]he CPU 313 executes this program to control the other components of the receiver 301" (Chimoto 7:61-63) and "the receiver 302 may have extra module receptacles to incorporate additional modules" (Chimoto 10:58-59). However, the Chimoto reference does not specifically disclose "wherein the command is described and embedded in a script of hypertext, wherein the hypertext is interpreted by a browser and a picture for operating the extension function is displayed, and wherein a command corresponding to the function is embedded and displayed in the picture for operating the extension function." Now note the Humpleman et al. reference that discloses home network, browser based, command and control. The claimed "wherein the command is described and embedded in a script of hypertext, wherein the hypertext is interpreted by a browser and a picture for operating the extension function is displayed" is met by "[t]he browser based DTV 102 receives the HTML files from the home devices over the home network 100 using the HTTP protocol. Each HTML file contains specific control and command information for a respective home device. The HTML files enable the browser based DTV 102 to graphically display control and command information to a user for a particular home device" (Humpleman 6:60-66). The claimed "and wherein a command corresponding to the function is embedded and displayed in the picture for operating the extension

function" is met by the embedding of commands in the picture "708" as illustrated in Figure 11. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Chimoto receiver with extra module receptacles with the Humpleman et al. controlling of other devices for the purpose extending the upgrade functionality of the receiver and to allow a user to easily control diverse devices in their home with a single remote control.

As to claim 18, please see rejection of claim 6.

7. Claims 10-12 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chimoto et al. (US 5,838,383) in further view of Trovato et al. (US 6,469,742 B1).

As to claim 10, the claimed "wherein when each block connected to said bus is added or substituted, software for operating the added or substituted block is automatically installed." Note the Chimoto et al. reference discloses "[t]he main memory stores a control program, The CPU 313 executes this program to control the other components of the receiver 301" (Chimoto 7:61-65) and "the modules 303 to 308 can be removed form the housing of the receiver 301. Therefore, the modules 303 to 308 can easily be replaced by other modules to change the functions the receiver 301 can perform. Furthermore, the receiver 302 may have extra module receptacles to incorporate additional modules" (Chimoto 10:54-59). However, the Chimoto reference is silent as to installing software to control the new modules. Now note the Trovato et al. reference that discloses consumer electronic devices with adaptable upgrade capability. The claimed "software for operating the added or substituted block is automatically installed" is met by "[o]nce new modules are identified an automatic upgrade may be provided"

(Trovato 4:45-61). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Chimoto adding/substituting modules on the bus with the Trovato et al. automatic installation of corresponding software for the purpose of providing software/driver needs without requiring user interaction and without unnecessarily storing a plurality of different device drivers (Trovato 5:27-34).

As to claim 11, the claimed "wherein software for operating the added or substituted block is stored in a memory there of" is met by the Chimoto et al. and Trovato et al. combination as discussed above wherein "[m]odules 16 may include device drivers and protocols for interfacing with CPU 12 stored in memory 17" (Trovato 4:20-21). The claimed "wherein when the block is added or substituted, the software stored in the memory is installed" is also met by the Chimoto et al. and Trovato et al. combination as discussed above wherein "[o]nce new modules are identified an automatic upgrade may be provided [/installed]" (Trovato 4:50-51; 5:9-11).

As to claim 12, the claimed "wherein when each block connected to said bus is added or substituted, a service center is accessed through a telephone line, software for operating the added or substituted block is downloaded from the service center through the telephone line, and the downloaded software is installed" is met by the Chimoto et al. and Trovato et al. combination as discussed above wherein "system 100 includes a remote station 101. Remote station 101 includes a transmitter 102 for transmitting upgrade information to a plurality of devices 10. Transmission of upgraded information may be delivered by a...telephone network...Remote station 101 may further include a receiver 106 for receiving and handling transmission requests from devices 10 which

need upgrade or new software pursuant to hardware changes as described above" (Trovato 5:35-49) wherein "[u]pon receiving the appropriate driver(s) or information, device 10 is upgraded and the registry of modules is updated in operating system 20" (Trovato 5:9-11).

As to claim 22, please see rejection of claim 10.

As to claim 23, please see rejection of claim 11.

As to claim 24, please see rejection of claim 12.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Borseth reference (US 6,340,997 B1) discloses a worldwide television tuning system with object-based tuning control modules.

The McClellan et al. reference (US 5,619,250) discloses an operating system for interactive television system set top box utilizing dynamic system upgrades.

The Mao et al. reference (US 2003/0115612 A1) discloses a digital TV system with synchronized world wide web content.

The Ozawa et al. reference (US 6,343,379 B1) discloses a receiver and program updating method.

The Arai et al. reference (US 6,532,591 B1) discloses a system for downloading computer software with broadcasting program.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm

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PRIMARY EXAMINER